

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method for identifying cellular protein antigens, to which a subject with cancer produces autoantibodies and a subject without cancer does not, without prior knowledge of the proteins being identified, said method consisting of: (a) extracting proteins from a sample of cells; (b) separating the extracted proteins by two-dimensional electrophoresis; (c) transferring the proteins separated by two-dimensional electrophoresis to a membrane; (d) incubating the membrane with serum from a subject known to have the cancer; (e) detecting the proteins to which autoantibodies in the ~~patients~~ subject's serum have bound; and (f) comparing the proteins to which antibodies in the subject's serum sample bind to proteins to which antibodies in a control serum sample from a subject without cancer bind, wherein those proteins bound by antibodies in the subject's serum from the subject with cancer but not the control serum from the subject without cancer are identified as cellular protein antigens to which a subject with cancer produces autoantibodies and a subject without cancer does not.

2. (Original) The method of claim 1 wherein the sample of cells is derived from the subject's tumor.

3. (Canceled)

4. (Original) The method of claim 1 wherein the step of detecting the proteins to which autoantibodies in the subject's serum sample have bound comprises the use of a signal-generating component bound to an antibody that is specific for antibodies in the subject's sample.

5-21. (Canceled)